

February 5, 2002

Mr. William Caton  
Acting Secretary  
Federal Communications Commission  
445 12th St., S.W.  
Washington, DC 20554

**Re: Summary of Oral *Ex Parte* Presentations Concerning Ultra-Wide  
Band Deployment (ET Docket No. 98-153, filed electronically)**

Dear Mr. Caton:

On February 1 and 4, 2002, Mr. Geoffrey Anderson (Vice President, Advanced Wireless Technologies), Mr. Paul Feinberg (Director, Advanced Wireless Technologies) and Mr. John Godfrey (Senior Manager, Government Affairs) held a series of *ex parte* meetings with the following FCC staff:

February 1:

- Ed Thomas, Mike Marcus, and John Reed, Office of Engineering and Technology; Bob Pepper and John William, Office of Plans and Policy
- Mr. Paul Margie, Office of Commissioner Michael Copps

February 4:

- Mr. Bryan Tramont, Office of Commissioner Kathleen Abernathy

The purpose of the meetings was to discuss Sony Electronics, Inc.'s support for expeditious approval of commercial deployment of Ultra-Wide Band (UWB) technology. In the meetings, Sony highlighted two themes:

1. There is enough technical information in the public record for the Commission, in consultation with the Department of Commerce, to make a well-informed decision on how UWB devices shall use the spectrum in a commercially viable manner, while also protecting existing services.
2. Sony is very interested in exploring the application of UWB technology to high speed, low power consumption wireless data communications in electronic products, including both fixed and portable products. To the extent that the Commission's rules governing UWB affect the data rate, power consumption, and/or portability of UWB technology, they may strongly influence the technology's commercial viability.

As shown in the attached presentation slides, Sony compared the anticipated performance capabilities of UWB with existing wireless data technologies and described UWB's potential to provide a significant evolutionary step forward.

Sony explained that the commercial viability of UWB for wireless communications would be significantly hampered if the Commission adopts regulations

that prohibit or excessively constrain the performance of peer-to-peer communications between two portable UWB devices. Sony observed that with respect to peer-to-peer communications, if the Commission were to determine that protection of existing services requires holding communication between two portable UWB devices to a more stringent emission limit than is permitted between a portable and a fixed device or between two fixed devices, the FCC might reasonably implement such a restriction without holding all communications between portable devices at all times to the more stringent limit. Specifically, it should be technically possible to permit direct communication between portable devices at higher emission levels—the levels that might be permitted for fixed devices—if the portable devices stay within range of, and subject to the control and monitoring of, a fixed device. This is one possible approach that was discussed as a way to enable much more flexibility in implementing UWB data communications than the alternative of banning or severely limiting communication between portable devices outright.

With sincere regards,

(signed)

John Godfrey  
Senior Manager, Government Affairs  
Sony Electronics, Inc.

Enclosure

cc:

Ed Thomas, Mike Marcus, John Reed, Office of Engineering and Technology  
Bob Pepper, John Williams, Office of Plans and Policy  
Paul Margie, Office of Commissioner Michael Copps  
Bryan Tramont, Office of Commissioner Kathleen Abernathy

# Sony UWB Position

FCC Meeting February 1, 2002

Geoff Anderson

John Godfrey

Paul Feinberg

Sony Electronics Inc.

## UWB Wireless Requirements

Primary UWB market is wireless data communications with these features:

- *high data rate*—for audio and video communications
- *low power and size*—for portable applications
- *low cost*—for mass market products

Sony Electronics Inc.

# UWB Benchmarking

	Max Transmission Rate	Coverage	Output Power	Power Consumption (Full Duty)
Bluetooth	1Mbps	WPAN (10m)	1mW	100mW
802.11b	11Mbps	WLAN (100m)	50 - 100mW	1W
802.11a	54Mbps	WLAN (100m)	50- 160mW	1.5W
UWB (Source UWB proponents)	<i>100Mbps</i>	WPAN (10m)	<i>400± W</i>	<i>200 -500mW</i>

Sony Electronics Inc.

## UWB Commercial Usage Requirements

Value for wireless communications higher if  
peer-to-peer and outdoor uses are allowed

- Banning peer-to-peer use would preclude many potentially valuable consumer and professional applications
- Banning outdoor use would preclude many professional applications

Sony Electronics Inc.

# FCC Rules Creates Brand New Industry

- Rulemaking could enable a new, entrepreneurial U.S. industry to form and grow
- Stimulate the electronics sector in general as new applications are enabled
- Enable more efficient use of spectrum, a long-standing goal of U.S. policy-makers
- Set precedent for global harmonization

Sony Electronics Inc.